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ROUND ROBIN ARBITRATION SYSTEM

ABSTRACT OF THE INVENTION

- Round robin arbitration system includes a first round robin arbitration module and a second round robin arbitration module. The first round robin arbitration module has a first bit width. It is configured to partition a plurality of requests into a plurality of blocks of requests, to select a block having one or more active requests using round robin arbitration, and to generate a first index corresponding to the selected block. The second round robin arbitration module has a second bit width. It is configured to store each request of the selected block, to select each active request of the selected block using round robin arbitration, to generate a second index corresponding to the selected active request, and to generate a first signal for synchronizing operation of the first and second modules. The round robin arbitration system has a bit width that a product of the first and second bit widths.